
An Exploratory Study On Motives And Use Of Electronic Resources By Graduate Students In Navi Mumbai

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Abstract: Today's era is very well-known as the electronic era or technology era as technology is growing at a very fast pace and today's invention is tomorrow's ancient like this situation we are observing. As many changes are happening daily in technology as well as in the information technology world. During COVID-19, we know the importance of online/electronic resources is like a very vital need in education, as it acts as a very important educational tool for acquiring knowledge. One can use online/e-resources as a technological tool which can be helpful in developing reading habits too. A variety of characters of e-resources are available online like e-journals, e-books, online archive's such as DOAJ, Elsevier, J-Gate, ProQuest online databases, PDF Drives, MOOCs etc. are accessible online using electronic devices. Without wasting much time, money, everyone can take advantage of acquiring information worldwide. This paper explores the e-resource usage by graduate students considering demographic factors like age, gender and motives for e-resources usage. For this study data of 246 graduate students from various colleges from the Navi Mumbai region is collected and used for this study. The data analysis is done using descriptive statistics and chi square test. It is found that there is no significant difference between e-resource usage and gender. It is also found that there is an association between age and sources of getting e-resources.

Keywords: Internet, graduate students, electronic resources, e-journals, e-books, MOOCs, COVID-19.

INTRODUCTION:

Electronic resources, which are materials in the online/digital format which can be accessible using electronic media. We can see various types of e-resources such as e-thesis, e-journals (Doaj, Springer, Elsevier, Wiley, Sage, Emerald, etc.), online educational resources, e-book (pdf drives, free eBooks, kobo, pdfbooks, read print etc.) CD-ROM database, online databases, e-mail, FTP, Gopher, remote login, Mooc (Swayam, NPTEL, Coursera, Academic earth), etc. which can be in different formats viz; .Pdf, .html, .asp, etc. Due to a variety of usefulness and various benefits of e-resources, it is widely used in the education sector. It can be useful for everyone who is in need of getting recent information irrespective of a particular field, we can get worldwide information just by using a single click without spending money on travelling and paper. So that we can call it a paperless transaction. There are variety of benefits, a few are saving money, saving time, useful in writing assignments, research projects etc.

LITERATURE REVIEW:

(Obasuyi, July-Aug -2020) Outcomes discovered that there was a high and substantial level of utilization of the library among the undergraduate students of the university. Demographic attributes (academic castigation, level of learning, gender, and age) constituted a collective substantial contribution to the usage of the library. The level of learning made a significant relative contribution towards the effective utilization of the academic library. The Radiant energies should be carefully laid in an appropriate place by the academic administrators of the library to sustain these desired results and progress on it.

(Quadri, 2013) Demographic appearances have represented critical aspects in understanding the potential application of information technology, extensive knowledge, library resources, and adequate facilities specifically in higher education across the globe. Demographic characteristics often offer vital indications as to what factors subsidize undergraduates' usage of online library resources.

(Usoro, 2018) The characteristics of that student demographic are sufficient for inducing their usage of the library. Demographic appearances comprise age, marital status, gender, academic discipline, level of study, socio-economic background, origin, religious conviction etc.

(Prakashe, 2015) The most significant role of e-resources has to play in the field of education to deliver better facilities and unrestricted access. Due to the detonation of information and communication technologies (ICT),

e-resources have become more prevailing tools that permit users to explore the information more effectively and efficiently. Through ICT, libraries can instantly deliver better services and satisfying varied user desires. ICT helps to instantly transform libraries into digital and virtual libraries where books, journals and periodicals have been transferred into e-books, e-journals and e-resources.

(Madhusudhan, 2010) Depict that e-resources have undoubtedly become an essential part of the information desires of research scholars at Kurukshetra University, and they can remain virtuous alternatives for conservative resources, provided access is fast.

(Mendhe & Dhandore, 2014) Found out the cognizance of e-resources in the scientific community of agronomy engineering and their comparative affluence of considered usage. They have noticed that the accessibility of e-resource on the institute campus is almost sufficient for all the prevailing disciplines, but the Information Communication Technology (ICT) infrastructure is not adequate to utilize these resources and can in cumber the facility to meet the requirements of users.

(Sudhier, 2011) The Illustrated study shows that 68% of respondents use e-resources for academic purposes, 23% of respondents prefer e-resources for e-mail, 30% of respondents use it for conference presentation and 11% use e-resources to exchange ideas. Only 8% of students make use of it for projects and assignment work. Most of the respondents from the M.Phil discipline prefer to use it for academic purpose. Only a slight small percentage, 6% of users choose e-resources for exchanging ideas, and the remaining users prefer social network and entertainment.

(Mwantimwa & Elia, 2017) The findings propose there was a substantial association between awareness and access. The insinuation is that academic faculty members and research scholars who are cognizant are most probable to instantly access and use e-resources than those who are not. Through being aware and having admittance does not inevitably induce faculty members and research scholars to refer to e-resources, they enhance their possibility of using these e-resources in their work. Other aspects like knowledge, skills, technology-savvy, and individual drive must be considered.

RESEARCH METHODOLOGY:

OBJECTIVES:

- To study e-resource usage by using demographic characteristic.
- To examine the sources of using e-resources.
- To identify the reasons/motives for using e-resources.

HYPOTHESIS:

- Gender and sources of getting e-resources are insignificant
- Age and sources of getting e-resources of the graduate students are associated.

RESEARCH DESIGN:

It comprises the usage of e-resources by graduate students in Navi Mumbai region considering various factors like age, gender, frequency of e-resources, reasons for using e-resources and not using e-resources and sources used to access e-resources. For this study, data was collected using a pre-structured questionnaire from 246 graduate students from various colleges in Navi Mumbai. SPSS version 23 is used for data analysis, i.e. descriptive statistics, ANOVA, and chi-square method.

DATA ANALYSIS AND INTERPRETATION:

- **Objective1. To Study e-resource usage by using demographic characteristic**

Table1a. Use of E-resource by gender

| From where do you get access to e-resources? | | Gender | | | | | |
|--|--|--------|------------|--------|------------|-------|------------|
| | | Male | | Female | | Total | |
| | | Count | Column N % | Count | Column N % | Count | Column N % |
| From where do you get access to e-resources? | a. Computer Lab with internet in College | 24 | 22.0% | 30 | 21.9% | 54 | 22.0% |
| | b. Mobile phone with internet access | 84 | 77.1% | 110 | 80.3% | 194 | 78.9% |
| | c. Wi-Fi access at college | 16 | 14.7% | 16 | 11.7% | 32 | 13.0% |
| | d. Wi-Fi access at home/Residence | 44 | 40.4% | 57 | 41.6% | 101 | 41.1% |
| | e. Cyber Café | 12 | 11.0% | 8 | 5.8% | 20 | 8.1% |
| Total | | 109 | 100.0% | 137 | 100.0% | 246 | 100.0% |

Table1b. Pearson Chi-Square Tests

| From where do you get access to e- | Chi-square | Gender |
|------------------------------------|------------|--------|
| | | 3.073 |

| | | |
|---|------|-------|
| resources? | df | 5 |
| | Sig. | .0489 |
| Results are based on nonempty rows and columns in each innermost sub table. | | |

Table1a comprises the use of electronic resources by gender. It is seen from the table that 77.1% male and 80.3% female students are accessing e-resources using mobile phones with internet access. Following by 40.4% male and 41.6% female students, are accessing e-resources using Wi-Fi access at home/residence. Moreover, from the results of the chi-square test, it is observed from table1b that there is no significant relationship between gender and sources of getting e-resources.

Table2a. Use of E-resource by Age

| From where do you get access to e-resources? | | Age | | | | | | | | | |
|--|--|-------------|------------|-------|------------|-------|------------|----------|------------|-------|------------|
| | | 17-18 Years | | 19-20 | | 21-22 | | Above 22 | | Total | |
| | | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % | Count | Column N % |
| From where do you get access to e-resources? | a. Computer Lab with internet in College | 2 | 8.0% | 43 | 27.6% | 7 | 13.7% | 2 | 14.3% | 54 | 22.0% |
| | b. Mobile phone with internet access | 21 | 84.0% | 128 | 82.1% | 31 | 60.8% | 14 | 100.0% | 194 | 78.9% |
| | c. Wi-Fi access at college | 2 | 8.0% | 23 | 14.7% | 5 | 9.8% | 2 | 14.3% | 32 | 13.0% |
| | d. Wi-Fi access at home/Residence | 8 | 32.0% | 67 | 42.9% | 21 | 41.2% | 5 | 35.7% | 101 | 41.1% |
| | e. Cyber Café | 3 | 12.0% | 9 | 5.8% | 7 | 13.7% | 1 | 7.1% | 20 | 8.1% |
| | Total | 25 | 100.0% | 156 | 100.0% | 51 | 100.0% | 14 | 100.0% | 246 | 100.0% |

Table2b. Pearson Chi-Square Tests

| From where do you get access to e-resources? | | Age | |
|---|--|------------|---------------------|
| | | Chi-square | df |
| | | 29.819 | 15 |
| | | Sig. | .013 ^{*,b} |
| Results are based on nonempty rows and columns in each innermost sub table. | | | |
| * The Chi-square statistic is significant at the .05 level. | | | |
| b. More than 20% of cells in this sub table have expected cell counts less than 5. Chi-square results may be invalid. | | | |

Table2a comprises the use of electronic resources by the age of the students. It is seen from the table that about 84% students of age group 17-18, 82.1% students of age group 19-20, 60.8% students of age group 21-22 years and 100% students of age above 22 years are accessing e-resources with their mobile phone having internet connections. Similarly it is being seen that 32% students of age group 17-18, 42.9% students of age group 19-20, 41.2% students of age group 21-22 years and 35.7% students of age above 22 years are accessing e-resources with Wi-Fi access at home / residence.

Also, from the results of chi-square test, it is observed from table2b that there is an association between age and the source of getting e-resources.

Table3. Comparisons of Column Proportions ^b

| | | Age | | | |
|------------|----------------------------------|-------------|-------|-------|----------|
| | | 17-18 Years | 19-20 | 21-22 | Above 22 |
| | | (A) | (B) | (C) | (D) |
| From where | a. Computer Lab with internet in | | | | |

| | | | | | |
|-----------------------------------|--------------------------------------|--|---|--|--------------|
| do you get access to e-resources? | College | | | | |
| | b. Mobile phone with internet access | | C | | ^a |
| | c. Wi-Fi access at college | | | | |
| | d. Wi-Fi access at home/Residence | | | | |
| | e. Cyber Café | | | | |

Results are based on two-sided tests with significance level .05. For each significant pair, the key of the category with the smaller column proportion appears under the category with the larger column proportion.

- a. This category is not used in comparisons because its column proportion is equal to zero or one.
- b. Tests are adjusted for all pairwise comparisons within a row of each innermost sub table using the Bonferroni correction.

From the above table3, it is seen that while comparing two variables, sources of getting e-resources and age group of the student, it is found that as compared to the age group 21-22, the age groups 19-20 get more access to mobile phones.

- **Objective2. To examine the sources of using e-resources**

Table4. Sources of getting access to e-resources

| | | Count | Column N % |
|--|--|-------|------------|
| From where do you get access to e-resources? | a. Computer Lab with internet in College | 54 | 22.0% |
| | b. Mobile phone with internet access | 194 | 78.9% |
| | c. Wi-Fi access at college | 32 | 13.0% |
| | d. Wi-Fi access at home/Residence | 101 | 41.1% |
| | e. Cyber Café | 20 | 8.1% |
| | Total | 246 | 100.0% |

Above table4 shows that majority of the students (78.9%) gets access to e-resources through mobile phone with internet access, 41.1% students gets access to e-resources through Wi-Fi access at home/ Residence, 22% students gets access to e-resources through computer lab with internet connection in college and only 8.1% students access e-resources through cyber café. Hence, it is determined that the most common access of e-resources is through mobile phones with an internet connection and the least common access is a cyber café.

- **Objective3. To identify the motives / reasons for using e-resources**

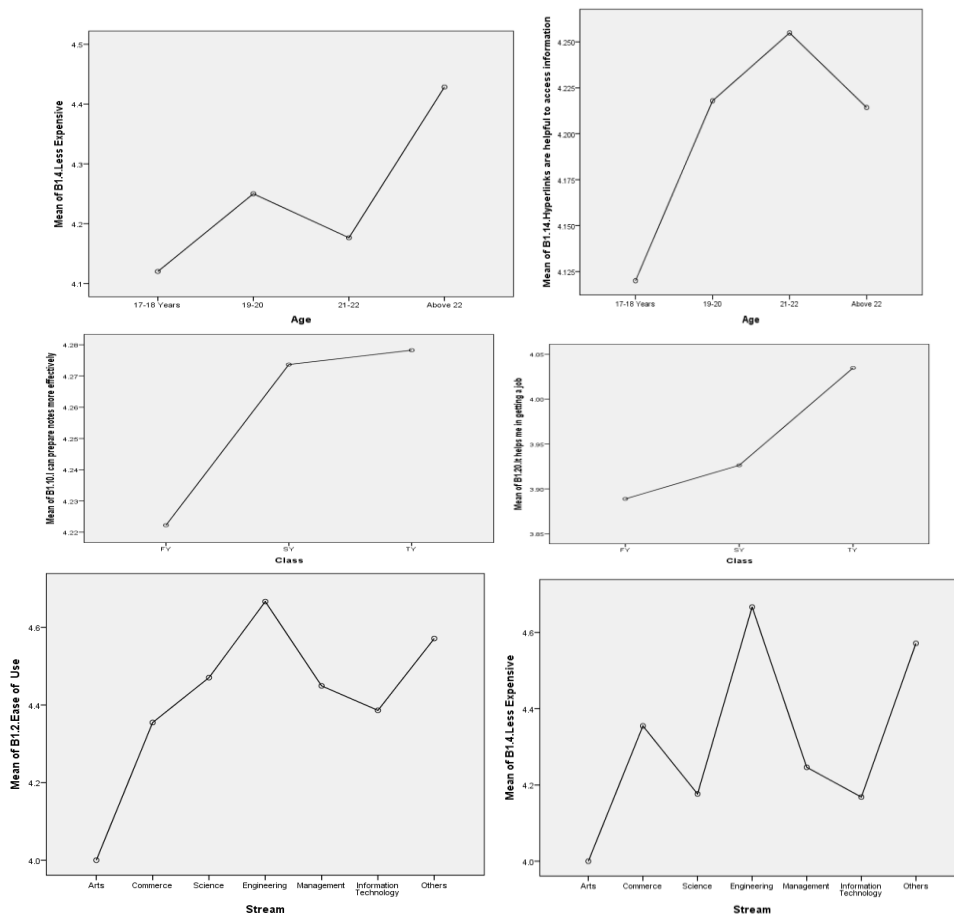
Table5. Reasons for Using E-resources w.r.t. Age of the students

| | | N | Mean | Std. Deviation | Std. Error | |
|---|-------------------------------|-----|------|----------------|------------|--|
| B1.Reasons for using E-resources - B1.1.Time Saving | 17-18 Years | 25 | 4.48 | .510 | .102 | |
| | 19-20 | 156 | 4.40 | .530 | .042 | |
| | 21-22 | 51 | 4.35 | .688 | .096 | |
| | Above 22 | 14 | 4.43 | .756 | .202 | |
| | Total | 246 | 4.40 | .576 | .037 | |
| | 17-18 Years | 25 | 4.44 | .507 | .101 | |
| B1.2.Ease of Use | 19-20 | 156 | 4.42 | .580 | .046 | |
| | 21-22 | 51 | 4.37 | .599 | .084 | |
| | Above 22 | 14 | 4.50 | .650 | .174 | |
| | Total | 246 | 4.42 | .578 | .037 | |
| | 17-18 Years | 25 | 4.12 | .726 | .145 | |
| | 19-20 | 156 | 4.26 | .699 | .056 | |
| B1.3.More Informative | 21-22 | 51 | 4.31 | .735 | .103 | |
| | Above 22 | 14 | 4.07 | .730 | .195 | |
| | Total | 246 | 4.24 | .710 | .045 | |
| | 17-18 Years | 25 | 4.12 | .881 | .176 | |
| | 19-20 | 156 | 4.25 | .742 | .059 | |
| | 21-22 | 51 | 4.18 | .793 | .111 | |
| B1.4.Less Expensive | Above 22 | 14 | 4.43 | .756 | .202 | |
| | Total | 246 | 4.23 | .766 | .049 | |
| | 17-18 Years | 25 | 4.36 | .638 | .128 | |
| | 19-20 | 156 | 4.23 | .641 | .051 | |
| | B1.5.Busy schedule at college | | | | | |

| | | | | | |
|---|-------------|-----|------|------|------|
| | 21-22 | 51 | 4.31 | .678 | .095 |
| | Above 22 | 14 | 4.36 | .745 | .199 |
| | Total | 246 | 4.27 | .652 | .042 |
| B1.6.The Internet makes me connected to the world especially, through reading | 17-18 Years | 25 | 3.92 | .702 | .140 |
| | 19-20 | 156 | 4.03 | .770 | .062 |
| | 21-22 | 51 | 4.00 | .775 | .108 |
| | Above 22 | 14 | 4.00 | .679 | .182 |
| | Total | 246 | 4.01 | .756 | .048 |
| B1.7.The Internet motivates me to read and explore many topics I have not seen. | 17-18 Years | 25 | 4.40 | .500 | .100 |
| | 19-20 | 156 | 4.34 | .638 | .051 |
| | 21-22 | 51 | 4.25 | .744 | .104 |
| | Above 22 | 14 | 4.29 | .825 | .221 |
| | Total | 246 | 4.33 | .658 | .042 |
| B1.8.It helps me get better grades in tests and exams | 17-18 Years | 25 | 4.24 | .523 | .105 |
| | 19-20 | 156 | 4.22 | .684 | .055 |
| | 21-22 | 51 | 4.12 | .653 | .091 |
| | Above 22 | 14 | 4.21 | .893 | .239 |
| | Total | 246 | 4.20 | .674 | .043 |
| B1.9.I can prepare notes more effectively | 17-18 Years | 25 | 4.24 | .723 | .145 |
| | 19-20 | 156 | 4.28 | .628 | .050 |
| | 21-22 | 51 | 4.24 | .790 | .111 |
| | Above 22 | 14 | 4.36 | .745 | .199 |
| | Total | 246 | 4.27 | .677 | .043 |
| B1.10.I can get information with more speed | 17-18 Years | 25 | 4.40 | .866 | .173 |
| | 19-20 | 156 | 4.38 | .656 | .053 |
| | 21-22 | 51 | 4.45 | .642 | .090 |
| | Above 22 | 14 | 4.43 | .756 | .202 |
| | Total | 246 | 4.40 | .679 | .043 |
| B1.11.I can download any books on web | 17-18 Years | 25 | 4.32 | .690 | .138 |
| | 19-20 | 156 | 4.24 | .673 | .054 |
| | 21-22 | 51 | 4.33 | .683 | .096 |
| | Above 22 | 14 | 4.21 | .893 | .239 |
| | Total | 246 | 4.26 | .688 | .044 |
| B1.12.Locating and searching is very easy | 17-18 Years | 25 | 4.36 | .490 | .098 |
| | 19-20 | 156 | 4.31 | .608 | .049 |
| | 21-22 | 51 | 4.47 | .674 | .094 |
| | Above 22 | 14 | 4.29 | .825 | .221 |
| | Total | 246 | 4.35 | .625 | .040 |
| B1.13.Hyperlinks are helpful to access information | 17-18 Years | 25 | 4.12 | .332 | .066 |
| | 19-20 | 156 | 4.22 | .675 | .054 |
| | 21-22 | 51 | 4.25 | .688 | .096 |
| | Above 22 | 14 | 4.21 | .893 | .239 |
| | Total | 246 | 4.22 | .663 | .042 |
| B1.14.I get maximum information on any subject | 17-18 Years | 25 | 4.40 | .500 | .100 |
| | 19-20 | 156 | 4.27 | .666 | .053 |
| | 21-22 | 51 | 4.41 | .669 | .094 |
| | Above 22 | 14 | 4.36 | .745 | .199 |
| | Total | 246 | 4.32 | .655 | .042 |
| B1.15.I feel joy and comfort spending time to read online | 17-18 Years | 25 | 4.08 | .640 | .128 |
| | 19-20 | 156 | 4.04 | .666 | .053 |
| | 21-22 | 51 | 4.14 | .849 | .119 |
| | Above 22 | 14 | 4.00 | .784 | .210 |
| | Total | 246 | 4.07 | .708 | .045 |
| B1.16.It helps me to upgrade skills | 17-18 Years | 25 | 4.28 | .458 | .092 |
| | 19-20 | 156 | 4.23 | .661 | .053 |
| | 21-22 | 51 | 4.35 | .594 | .083 |
| | Above 22 | 14 | 4.21 | .802 | .214 |

| | | | | | |
|---|-------------|-----|------|-------|------|
| | Total | 246 | 4.26 | .637 | .041 |
| B1.17.It helps in my assignments and projects | 17-18 Years | 25 | 4.44 | .507 | .101 |
| | 19-20 | 156 | 4.38 | .594 | .048 |
| | 21-22 | 51 | 4.47 | .644 | .090 |
| | Above 22 | 14 | 4.29 | .825 | .221 |
| | Total | 246 | 4.40 | .609 | .039 |
| B1.18.It is my hobby | 17-18 Years | 25 | 3.64 | .907 | .181 |
| | 19-20 | 156 | 3.75 | .870 | .070 |
| | 21-22 | 51 | 3.80 | .895 | .125 |
| | Above 22 | 14 | 3.36 | 1.008 | .269 |
| | Total | 246 | 3.73 | .887 | .057 |
| B1.19.It helps me in getting a job | 17-18 Years | 25 | 3.72 | .678 | .136 |
| | 19-20 | 156 | 3.97 | .757 | .061 |
| | 21-22 | 51 | 4.14 | .601 | .084 |
| | Above 22 | 14 | 3.86 | .663 | .177 |
| | Total | 246 | 3.97 | .719 | .046 |

Table 5 shows descriptive statistics of reasons for using e-resources. It is found from this table that the total maximum mean value is 4.42, this indicates that the main reason for using e-resources is ease of use, followed by maximum mean value of 4.40 which shows that key reasons for using e-resources are time saving, high/more speed, it helps in assignments and projects. Also, it is seen from the table that students between the age group of 21-22 responded that e-resources are useful in getting maximum information on any subject (mean value 4.41). Correspondingly, it is seen from the above table that students between the age group of 21-22 responded that e-resources are useful in getting maximum information on any subject (mean value 4.41) and also help with the updating of skills (mean value 4.35). Similarly, it helps in motivating reading and exploring unseen topics (mean value 4.40), and it is less expensive.



The above figures show the trends of various reasons for using e-resources with respect to different age groups, class and stream in which they are studying. It is found from the figures that there is an increasing trend as per the age and class of the students. It means that senior students use e-resources more frequently as compared with junior students. Also, it is observed an increasing trend amongst reasons for e-resources and the stream of students.

CONCLUSION

E-resource is a precious tool which compliments the print resources. There are numerous benefits of e-resources viz; less expensive, access to updated information/ contents, additional links, saving traveling time, etc. Several online databases such as EBSCO, Science Direct, ACM, IEE etc., can be easily accessible from anywhere just using a single click of a button. This research paper explores some of the motives and uses of e-resources which can definitely be useful for students while accessing the e-contents for various purposes. This study was based on pilot data collected from 246 graduate students studying in different colleges in Navi Mumbai. It was found from this study that student's gender and sources of getting e-resources are insignificant. Furthermore, it is seen that there is an association between age and the source of getting e-resources. In today's situation of COVID-19, e-resources play a vigorous role in education as well as the entire system. There is no single field where we can't see the use of e-resources, so receiving essential knowledge about e-resources is today's need as it is found that for students it is useful for variety of reasons mainly it is less expensive, it can be helpful in assignments and projects, ease of use, high speed, getting maximum information about any subject, for upgrading skills and it assists in motivating in reading and in exploration of updated/ recent information.

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